DOCUMENT RESUME

ED 203 533 EA 013 725

AUTHOR Silver, Paula F.
TITLE The Effects of Attitudes on Quality Judgments of Inservice Programs.
PUB DATE Apr 81
NOTE 15p.: Paper presented at the Annual Meeting of the American Educational Research Association (Los Angeles, CA, April 13-17, 1981).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Attitude Measures; Attitudes; Bias; Participant Characteristics; *Participant Satisfaction; *Program Attitudes; *Program Evaluation; Questionnaires; Workshops

ABSTRACT

The attitudes of inservice workshop participants toward the workshop topics may affect their perceptions of workshop effectiveness. As a result, opinionaires could provide an inadequate means of evaluating inservice programs. At four workshops designed to enhance educational leaders' capacity to increase sex equity in their organizations, 67 participants completed preconference and postconference opinionaires, indicating their attitudes toward and cognitive knowledge of sex equity, and also completed questionnaires assessing conference quality. Instruments used were the Attitudes Toward Sex-Role Differentiation in Education questionnaire and three relevant scales of the Aesthetic Content Questionnaire. Attitudes did not change discernably during the workshops, and were found to be directly related to opinions of conference quality. Quality judgments were not related to gains or losses in cognitive knowledge. Some attitude scales proved better predictors of opinions of quality than others, and some opinion scales were more susceptible to attitudinal influences than others. (Author/PGD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
✓ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED203533

THE EFFECTS OF ATTITUDES ON QUALITY JUDGMENTS OF INSERVICE PROGRAMS

Paula F. Silver
University of Illinois

For presentation at the annual meeting of the American Educational Research Association, Los Angeles, 1981.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
P. Silver
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EA 013 725

A B S T R A C T

At five 1-1/2-day workshops designed to enhance educational leaders' capacity to increase sex equity in their organizations, pre-conference and post-conference data were collected regarding participants' attitudes toward sex equity and their cognitive knowledge about sex equity. Post-conference opinionnaires on conference quality were also gathered from the 67 individuals attending the entire session. Data were analyzed in terms of the six attitudinal scales of the Attitudes Toward Sex-Role Differentiation in Education (A/SRDE) questionnaire and the three relevant quality scales of the Aesthetic Content Questionnaire (ACQ). Although attitudes did not change discernably, they were found to be directly related to quality opinions; furthermore, quality judgments were not related to cognitive gain or loss scores. Some attitude scales were better predictors of quality opinions than others, and some opinion scales were more susceptible to attitudinal influence than others. The findings suggest that opinionnaires provide inadequate evaluations of inservice program effectiveness.

(148 words)

Inservice professional development programs for educational administrators are available in increasing quantity and from increasingly varied sources. School districts, professional associations, state departments of education, regional service centers, and university-based school development councils are some of the sources of programs designed to enhance practicing administrators' knowledge and skills. The inservice programs vary greatly in duration, focus, style, and degree of relevance to practice; but there is one element they all have in common: they are not evaluated systematically.

In most instances, there is no formal assessment of inservice program quality at all. In the relatively few cases in which there is an evaluation of sorts, this is usually in the form of an opinionnaire completed by program participants. The inservice programs, important as they are and costly as they are, are never evaluated with the degree of rigor usually recommended for assessment of schools' educational programs.

In the design of educational programs for school administrators, decisions about the topics to be treated are typically unsystematic as well. Often, there is no discernable rationale for the program contents nor any apparent sequence to series of sessions. Sometimes the decisions about program topics are based upon a procedure that has come to be called a "needs assessment." This procedure entails distributing a list of topics to prospective participants and asking those individuals to rate the topics on the basis of interest value, importance, perceived need, or a similar criterion. Almost never is knowledge or skill actually tested, and virtually never are subordinates asked to rate their superordinates' knowledge or skill with reference to the various topics.

In brief, to the extent that inservice programs for administrators are appraised at

all, they are judged on the basis of participants' opinions. And to the extent that the design of these programs is systematic at all, the planning is based on participants' opinions about topics.

A rather extensive body of literature on attitudes suggests that participants' opinions about the quality of an experience are likely to be the least reliable information. In addition, there is evidence to suggest that participants' opinions about their learning needs are an equally unreliable type of information (Davis, in press). In this paper we will focus primarily upon opinionnaire evaluations and will refer to opinionnaire needs assessments only briefly in the concluding section.

Opinions have been defined as verbal expressions of attitudes (Zimbardo, Ebbesen, & Maslach, 1977, p. 20). And attitudes have been defined as stable systems "of positive or negative evaluations, feelings, and tendencies toward action with respect to a social object (Krech, Crutchfield, & Livson, 1974)." The attitude literature suggests that attitudes can be construed as screening devices which serve to filter information and to influence individuals' interpretations of and feelings about the information they receive. Thus, it seems likely that inservice program participants' assessments of the instructional experience will be influenced by the participants' attitudes toward the topic treated.

Theoretical Framework

An overview of the literature on attitudes reveals a range of conceptualizations of the attitude construct. Some scholars, such as Sherif and Hovland (1971) and Schroder (1971), consider attitude to be primarily cognitive. Others, such as Shaw and Wright (1970), regard attitude as an affective phenomenon, and still others, like Katz (1971), emphasize the functional or behavioral nature of attitudes. Krech et al. (1974), as noted earlier, synthesized these perspectives in their interpretation of attitude as having cog-

nitive, affective and psychomotor dimensions.

Theorists who underscore the cognitive dimension note that attitudes have an essentially evaluative component. Zimbardo, Ebbesen and Maslach (1977), for example, consider attitudes to be "either mental readiness or implicit predispositions which exert some general and consistent influence on a fairly large class of evaluative responses (p. 20)." Those theorists who have studied cognitive balance (Heider, 1963) and dissonance reduction (Festinger, 1957) have contributed substantially to an understanding of attitudes by demonstrating that individuals maintain rather consistent networks of judgments about social objects. Consistency can be maintained by disregarding discrepant information, reinterpreting discrepant information, or discrediting the sources of discrepant information. Thus, social stimuli in the individual's environment that are perceived to be interrelated are likely to be evaluated either positively or negatively according to a generally consistent pattern that can be conceptualized as an attitude.

This brief discussion suggests that people who have a particular orientation toward a social issue or topic will perceive, interpret and evaluate events associated with that issue in accordance with their attitude. More specifically, it suggests that inservice program participants are likely to assess the program materials, activities and leaders in accordance with their attitudes toward the program topic and that they will pay greater attention to information that is congruent with their attitudes than to other information. This conjecture can be stated in the form of two hypotheses that guided the study reported here:

1. There is a relationship between workshop participants' attitudes toward the topic treated in the workshop and their judgments of the quality of the workshop experience.

2. There is a relationship between workshop participants' attitudes toward the topic treated and the amount of cognitive knowledge they gain as a result of the workshop experience.

Data Source

A series of inservice professional development workshops sponsored by the University Council for Educational Administration (UCEA) provided an excellent opportunity to examine the possible influence of attitudes on quality judgments and learning. The workshop series was part of a two-year project partially supported by the U.S. Office of Education under the Women's Educational Equity Act Program. Five conferences, each lasting one and one-half days or longer, were conducted. Each conference was held at a different university, each was directed toward a different group of practicing or potential administrators, and each entailed a different set of materials and leaders; however, all of the workshops were designed with the intent of increasing participants' cognitive, affective and skill-related knowledge essential for enhancing sex equity in education.

Four of the five workshops were used in this study. All workshop participants who completed both the pretest and the posttest measures were included in the sample. The result was a total of 67 subjects, including 36 females and 31 males. Subjects were anonymous throughout the study.

The respondents completed one set of instruments at the beginning of the workshop, before any activities had begun, and another set at the end of the workshop, after all activities had been completed but before discussion of the experience began. Pretest measures included demographic data, a cognitive pretest, and an attitudinal pretest. Posttest measures included a cognitive posttest, an attitudinal posttest, and a conference quality questionnaire. All instruments were distributed and collected by the project eval-

uator and were not seen by the workshop leaders.

Instruments

The instrument used to measure participants' attitudes regarding sex equity was the Attitudes Toward Sex-Role Differentiation in Education (A/SRDE) questionnaire (Davis, Engin, Podemski, & Silver, 1978) comprised of 45 Likert-type items. The instrument is comprised of six factors which account for 49% of its total variance (Silver & Davis, 1978) and which have been named and defined as follows:

1. General Traditionalism - perceptions about the extent of male dominance in various aspects of society, including education, politics, domestic relations, the professions, and recreation (20 items);
2. Professional Opportunities - attitudes toward affirmative action in the recruitment, selection, promotion, and remuneration of women and men in the professions (10 items);
3. Sex Segregation - attitudes about separation of the sexes in class assignments of students (5 items);
4. Political Action - attitudes about various forms of group action for increasing sex equity (13 items);
5. Language Usage - attitudes concerning forms of address and speech patterns (3 items);
6. Social Etiquette - attitudes about individuals' behaviors in social situations (6 items).

The A/SRDE had been found to be internally consistent, with an odd-even reliability coefficient greater than .90 and correlations of items with total score ranging from .30 to .69 (Silver & Davis, 1978, p. 239). Construct validity of the instrument was supported by its factor structure and its relationship to demographic characteristics of respondents (Silver, Podemski, & Engin, 1979; Silver & Davis, 1978) and to behavior patterns

(Heiberger & Silver, 1980).

In the present study, the factors were treated as scales, yielding six scale scores and a total score for each respondent. A further modification of the A/SRDE was that it was divided into alternate forms of 20 items each to serve as pretest and posttest measures. Even-numbered items drawn from each scale comprised the pretest, and odd-numbered items constituted the posttest; low-loading items were omitted. Pretest scale scores were found to be highly correlated with posttest scale scores (coefficients ranged from . 46 to .82), and pretest total scores correlated highly with posttest total scores ($r = .80$); however, there was no significant change in attitudes between pre- and post-test measures. In the analysis reported here, pretest scale and total scores were summed with their analogous posttest scale and total scores.

Knowledge about sex equity in education was measured by a cognitive pretest and posttest, each comprised of 10 items drawn randomly from a 30-item pool of multiple-choice questions sent in advance by the workshop leaders. Thus, the cognitive measures differed from conference to conference, but each conference had a 10-item pretest and a 10-item posttest. Since responses were either correct or incorrect, they were scored 1 or 0, respectively. The total score for each respondent on each test was the sum of correct answers. For the present study, cognitive gain/loss scores were computed by subtracting the pretest score from the posttest score for each respondent.

Judgments about conference quality were measured by the Aesthetic Content Questionnaire (ACQ), a 32-item Likert-type scale designed for project evaluation purposes. The ACQ consists of four scales, each intended to generate judgments about a different aspect of the workshop experience:

1. Materials - clarity, appropriateness and packaging of printed and audio-visual mater-

ials (6 items);

2. Aesthetics - technical quality and artistry of audio-visual materials (12 items);
3. Activities - pace, style and effectiveness of group-process exercises and events (7 items);
4. Leadership and Facilities - knowledge and skill of workshop leaders, and convenience of setting for participants (7 items).

Since sime workshops did not utilize audio-visual materials, Scale 2 was omitted for the present analysis. Scale scores were the sums of scale item scores, and total scores were the sums of scale scores. The ACQ exhibited internal consistency, in that correlations of scale scores with total scores ranged from .66 to .88. In addition, the ACQ differentiated conferences, with total and scale means differing significantly across workshops (Silver, 1978).

Methodology

Pearson correlations were used to test both hypotheses. For H_1 total and scale scores of the A/SRDE were correlated with total and scale scores of the ACQ. For H_2 total and scale A/SRDE scores were correlated with cognitive gain/loss scores. Individuals were the units of analysis, and significance levels of .05 or greater were sought.

Results

As shown in Table 1, five of the six A/SRDE scales were directly and significantly related to one or more of the ACQ scales, and A/SRDE total scores were significantly related to all of the ACQ scales. That is, all the dimensions of sex equity attitudes except the Language Usage dimension affected participants' evaluations of the conferences. The most influential attitudinal factor was Political Action, which accounted for 13.69%

of the variance in judgments about the materials used. Further, the Materials aspect of the conference assessments was the most susceptible to attitudinal influence, as it was significantly related to four of the six attitude scales. Thus, the first hypothesis was supported (see Attachment A).

Correlations of A/SRDE scores with cognitive gain/loss scores revealed no significant relationships. As shown in Table 2, all of the correlations were low and none was statistically significant (see Attachment B).

Further analysis revealed an inverse relationship between cognitive pretest and cognitive gain/loss scores ($r = -.55$, $p < .001$), suggesting a regression-toward-the-mean effect for the cognitive measures. The cognitive tests may not have been adequate measures of the actual cognitive contents of the conferences. On the other hand, mean posttest scores on the cognitive measures were significantly higher than cognitive pretest scores for all the conferences. Further analysis also indicated no relationship between cognitive gain/loss and opinions of conference quality. If the cognitive tests were adequate measures of learning, we can conclude that participants' opinions about the quality of the workshops were not based upon actual (cognitive) learning.

Significance

Although this study dealt with one set of inservice workshops and only the topic of sex equity in education was at issue, the findings cast serious doubt on the validity of opinionnaire evaluations of such programs. Not only did the participants' attitudes regarding sex equity color their judgments of the conferences, but participants' opinions bore no statistical relationship to the extent of their learning.

The findings lend support to the notion that people's attitudes or predispositions influence their interpretations, feelings, and judgments about subsequent experiences.

These same attitudes, it can be assumed, influence people's ratings of topics listed on a "needs assessment" protocol. The study and its conceptual foundation suggest the desirability of more valid planning and evaluation of inservice professional development programs for educational administrators.

REFERENCES

Davis, W. J. Designing inservice professional development programs for school administrators: Preferred structures. In W. J. Davis, J. A. Culbertson, & P. F. Silver (Eds.) The professional development of Title I principals. Washington, D.C.: Roy Littlejohn Associates, in press.

Davis, W. J., Engin, A. W., Podemski, R. S., & Silver, P. F. Attitudes Toward Sex-Role Differentiation in Education (A/SRDE), A Research Instrument. In P. F. Silver (Ed.), Handbook of assessment tools for enhancing educational equity. Columbus, Ohio: University Council for Educational Administration, 1978, 15-25.

Festinger, L. A theory of cognitive dissonance. Evanston, IL: Row, Peterson, 1957.

Heiberger, M. & Silver, P. F. Relationships between sex-role attitudes and home responsibilities. Unpublished research report, University of Tulsa, 1980 (mimeo).

Heider, F. The psychology of interpersonal relations. New York: Wiley, 1958.

Katz, D. The functional approach to the study of attitudes. In E. P. Hollander & R. G. Hunt (Eds.) Current perspectives in social psychology (3rd ed.). New York: Oxford University Press, 1971, 332-342.

Krech, D., Crutchfield, R. S., & Livson, N. Structure and development of social attitudes, Elements of psychology. New York: Alfred A. Knopf, 1974.

Schroder, H. M. Conceptual complexity and personality organization. In H. M. Schroder & P. Suedfeld (Eds.) Personality theory and information processing. New York: Ronald Press, 1971, 240-273.

Shaw, M. E. & Wright, J. M. The nature of attitudes, Scales for the measurement of attitudes. New York: McGraw-Hill, 1970, 1-14.

Sherif, M. & Hovland, C. I. Judgmental processes and problems of attitude. In E. P. Hollander & R. G. Hunt (Eds.) Current perspectives in social psychology (3rd ed.). New York: Oxford University Press, 1971, 390-396.

Silver, P. F. Evaluation report: Training modules for preparing educational leaders to enhance educational equity for females. Columbus, Ohio: University Council for Educational Administration, 1978.

Silver, P. F. & Davis, W. J. Educators' attitudes regarding sex equity. Planning & Changing, 1978, 9, 236-243.

Silver, P. F., Podemski, R. S., & Engin, A. W. Attitudes toward sex-role differentiation in education: Implications for Title IX implementation. Journal of Research and Development in Education, 1977, 10, 26-35.

Zimbardo, P. G., Ebbeson, E. B., & Maslach, C. Influencing attitudes and changing behavior. Reading, MA: Addison-Wesley, 1977.

Table 1. Correlation Matrix of Attitude and Judgment Scores

A/SRDE Scores	ACQ Scores			
	Total	Materials	Activities	Leadership & Facilities
Total	.33*	.34*	.23#	.22#
1. Gen. Traditionalism	.27#	.24#	.16	.23#
2. Prof. Opportunities	.28**	.28**	.21#	.18
3. Sex Segregation	.25#	.19	.19	.22#
4. Political Action	.25#	.37*	.18	.08
5. Language Usage	.16	.16	.10	.11
6. Social Etiquette	.29**	.34*	.21#	.17

* $p < .005$, two-tailed test
** $p < .01$, two-tailed test
\# $p < .05$, two-tailed test

Table 2. Correlations of Attitude and Cognitive Gain/Loss Scores

A/SRDE Scores	Correlation Coefficients *
Total	.17
1. Gen. Traditionalism	.12
2. Professional Opportunities	.14
3. Sex Segregation	.03
4. Political Action	.13
5. Language Usage	.18
6. Social Etiquette	.13

* All non-significant, two-tailed tests